

**IN THE CLAIMS:**

Please enter the following cancellations, amendments and/or additions to the claims:

Claims 1-77. (Cancelled).

Claim 78. (Currently Amended) A method of obtaining isolated selected mRNA species or isolated selected cDNA species useful for diagnosing or identifying Alzheimer's disease or stage thereof in a human comprising the steps of:

- (a) isolating mRNA from cells of one or more humans which are known to have said disease or a stage thereof (diseased sample), wherein said cells are obtained from ~~a part of said humans distant to the area of said disease~~ blood, wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA;
- (b) isolating mRNA from corresponding cells of one or more normal humans (normal sample), wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA;
- (c) separating, by a non-sequence based separation technique, mRNA species or cDNA species present within each of the resulting isolated mRNA or isolated cDNA of step (a) and step (b), wherein the resulting separated mRNA species are optionally subject to reverse transcription to obtain separated cDNA species;
- (d) selecting two or more mRNA species or two or more cDNA species from the resulting separated mRNA

species or resulting separated cDNA species obtained in step (c), respectively, which are present at a different level in the normal sample than in the diseased sample by identifying a signal corresponding to each mRNA species or cDNA species, wherein the resulting selected two or more mRNA species are optionally subjected to reverse transcription to obtain two or more selected cDNA species; and

- (e) isolating the resulting two or more selected mRNA species or resulting two or more selected cDNA species obtained in step (d) to obtain isolated selected mRNA species or isolated selected cDNA species, wherein the resulting isolated selected mRNA species are optionally subjected to reverse transcription to obtain isolated selected cDNA species.

Claim 79. (Previously Presented) The method as claimed in Claim 78, wherein in steps (a) and (b), the resulting isolated mRNA is subjected to reverse transcription to obtain isolated cDNA.

Claim 80. (Previously Presented) The method as claimed in Claim 79, wherein said isolated cDNA is amplified.

Claim 81. (Previously Presented) The method as claimed in Claim 78, wherein said isolated cDNA is labelled.

Claim 82. (Previously Presented) The method as claimed in Claim 78, wherein, in step (e), between 50 and 100 mRNA species or cDNA species are isolated and selected.

**AMENDMENT AFTER FINAL**  
**U.S. Appln. No. 09/429,003**

Claim 83. (Previously Presented) The method as claimed in Claim 78, wherein, in step (e), between 10 and 500 mRNA species or cDNA species are isolated and selected.

Claim 84. (Previously Presented) The method as claimed in Claim 78, wherein, in step (c), said separation technique is gel electrophoresis.

Claims 85-86. (Cancelled).

Claim 87. (Currently Amended) A method of preparing a gene transcript pattern probe kit comprising the steps of:

- (a) isolating mRNA from cells of one or more humans which are known to have Alzheimer's disease or a stage thereof (diseased sample), wherein said cells are obtained from ~~a part of said humans distant to the area of said disease~~ blood, wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA;
- (b) isolating mRNA from corresponding cells of one or more normal humans (normal sample), wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA;
- (c) separating, by a non-sequence based separation technique, mRNA species or cDNA species present within each of the resulting isolated mRNA or isolated cDNA of step (a) and step (b), wherein the resulting separated mRNA species are optionally subject to reverse transcription to obtain separated cDNA species;

**AMENDMENT AFTER FINAL**  
**U.S. Appln. No. 09/429,003**

- (d) selecting two or more mRNA species or two or more cDNA species from the resulting separated mRNA species or resulting separated cDNA species obtained in step (c), respectively, which are present at a different level in the normal sample than in the diseased sample by identifying a signal corresponding to each mRNA species or cDNA species, wherein the resulting selected two or more mRNA species are optionally subjected to reverse transcription to obtain two or more selected cDNA species;
- (e) isolating the resulting two or more selected mRNA species or resulting two or more selected cDNA species obtained in step (d) to obtain isolated selected mRNA species or isolated selected cDNA species, wherein the resulting isolated selected mRNA species are optionally subjected to reverse transcription to obtain isolated selected cDNA species; and
- (f) immobilizing the resulting isolated selected mRNA species or isolated selected cDNA species of step (e) on at least one solid support so as to form a gene transcript pattern probe kit.

Claim 88. (Previously Presented) The method as claimed in Claim 87, wherein, prior to immobilizing in step (f), the resulting isolated selected mRNA species or isolated selected cDNA species of step (e) are amplified.

**AMENDMENT AFTER FINAL**  
**U.S. Appln. No. 09/429,003**

Claim 89. (Previously Presented) The method as claimed in Claim 87, wherein said solid support is a filter.

Claim 90. (Currently Amended) A method of preparing a standard gene transcript pattern characteristic of Alzheimer's disease or stage thereof comprising the steps of:

- (a) isolating mRNA from cells of one or more humans known to have said disease or a stage thereof, wherein said cells are obtained from ~~a part of said humans distant to the area of said disease~~ blood, wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA;
- (b) hybridizing the resulting isolated mRNA or isolated cDNA of step (a) to two or more mRNA species which are present at a different level in cells in a normal sample than corresponding cells in an Alzheimer's diseased sample, wherein the two or more mRNA species or cDNA species are specific for said disease or stage thereof and wherein said cells are obtained from ~~a part of said human distant to the area of said disease~~ human blood, or to two or more cDNA species transcribed from said mRNA species, wherein said mRNA or cDNA species are immobilized on a solid support; and
- (c) assessing the amount of hybridisation so as to obtain said standard gene transcript pattern.

**AMENDMENT AFTER FINAL**  
**U.S. Appln. No. 09/429,003**

Claim 91. (Currently Amended) A method of preparing a test gene transcript pattern for Alzheimer's disease or stage thereof comprising the steps of:

- (a) isolating mRNA from cells of a test human, wherein said cells are obtained from ~~a part of said human distant to the area of said disease~~ blood, wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA;
- (b) hybridizing the resulting isolated mRNA or isolated cDNA of step (a) to two or more mRNA species which are present at a different level in cells in a normal sample than corresponding cells in an Alzheimer's diseased sample, wherein the two or more mRNA species or cDNA species are specific for said disease or stage thereof and wherein said cells are obtained from ~~a part of said human distant to the area of said disease~~ human blood, or to two or more cDNA species transcribed from said mRNA species, wherein said mRNA or cDNA species are immobilized on a solid support; and
- (c) assessing the amount of hybridization so as to obtain said test gene transcript pattern.

**AMENDMENT AFTER FINAL**  
**U.S. Appln. No. 09/429,003**

Claim 92. (Currently Amended) A method of diagnosing or identifying Alzheimer's disease or stage thereof in a test human comprising the steps of:

- (a) isolating mRNA from cells of a test human, wherein said cells are obtained from ~~a part of said human distant to the area of said disease~~ blood, wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA;
- (b) hybridizing the resulting isolated mRNA or isolated cDNA of step (a) to two or more mRNA species which are present at a different level in cells in a normal sample than corresponding cells in an Alzheimer's diseased sample, wherein the two or more mRNA species or cDNA species are specific for said disease or stage thereof and are obtained from ~~a part of said human distant to the area of said disease~~ human blood, or to two or more cDNA species transcribed from said mRNA species, wherein said mRNA or cDNA species are immobilized on a solid support;
- (c) assessing the amount of hybridization so as to obtain a hybridization pattern;
- (d) comparing the resulting hybridization pattern obtained in step (c) with a hybridization pattern obtained by hybridizing isolated mRNA or isolated cDNA prepared from corresponding cells from one or more humans known to have said disease or

**AMENDMENT AFTER FINAL**  
**U.S. Appln. No. 09/429,003**

- stage thereof to the two or more mRNA species or two or more cDNA species transcribed from said RNA species, wherein said mRNA species or cDNA species are immobilized on a solid support; and
- (e) assessing the amount of hybridization, so as to determine the degree of correlation indicative of the presence of said disease or stage thereof, and so as to diagnose or identify said disease or a stage thereof in said test human.

Claims 93-94. (Cancelled).